ABSTRACT OF THE DISCLOSURE

A system and method for gamut mapping includes a luminance compression algorithm for gamut mapping that varies across different parts of the image. In shadow regions, a soft compression function is applied to bring out the detail. In other regions, including areas with high local contrast, a hard clipping function is applied to preserve local contrast. The algorithm adaptively blends between these two functions to ensure that the overall compression function is spatially smooth. The system and method may also use chrominance information to compute "perceived lightness", to be used as input to the low-pass filter. Also, the blending function $\alpha()$ could be a function of chrominance as well as luminance.